

CiNX

16

CB PLUS™

Fluid Head

OPERATOR'S MANUAL

- 1103 CiNX 3 Fluid Head
- 1105 CiNX 5 Fluid Head
- 1107 CiNX 7 Fluid Head



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Features and Controls

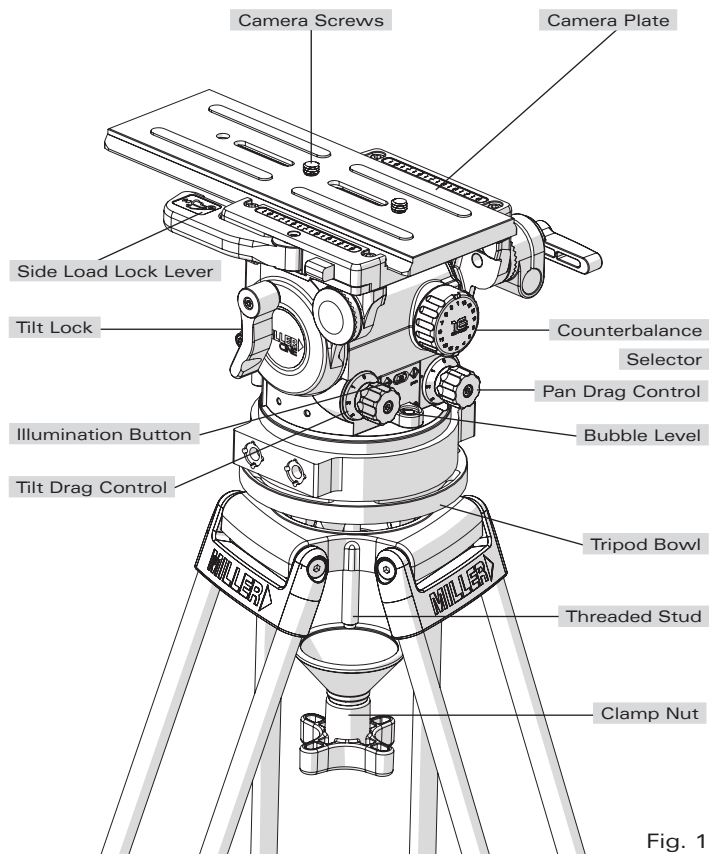


Fig. 1

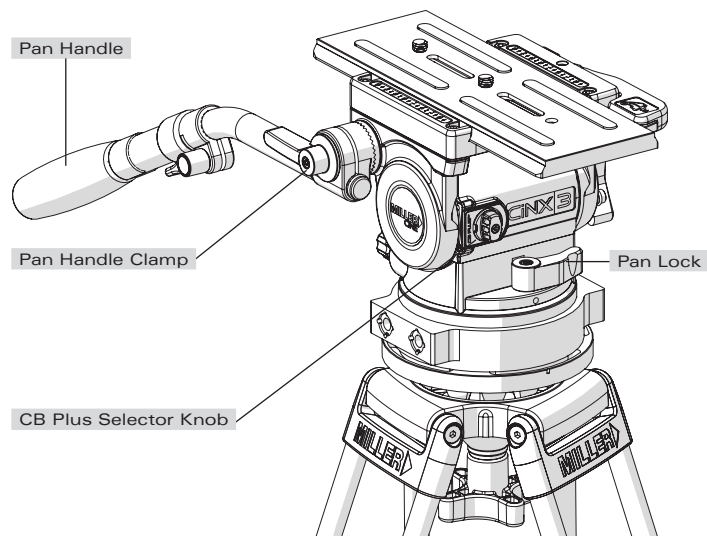


Fig. 2

Introduction

Thank you for purchasing the CiNX 3/5/7 Fluid head.

An impressive strength to size ratio makes the CiNX Fluid head ideal for use on feature films, documentaries and high-end television commercial productions that require mid-payload, frequent re-rigging and a diverse range of lenses and camera accessories.

CiNX Fluid head features an Arri type side-loading camera platform. It is designed to adapt to your needs by having an 100mm Bowl fitted as standard which can be quickly changed to 150mm bowl or Mitchell Base as optional accessories to suit your tripod and application.

The Fluid Drag and Counterbalance system was designed to provide excellent ergonomics and control by offering progressive and equal increments of drag and torque to give ultra-soft starts / stops and perfect diagonal transition. The controls are located on a single backlit panel and allow the users a highly functional means of controlling all aspects of the camera motion.

The CiNX Fluid head will give best performance when used on a wide range of Miller tripods (including the 100mm bowl Solo, 100mm Sprinter, HD and HDC range of Miller tripods). This will ensure maximum system compatibility to suit professional set-ups.

CiNX Fluid head will suit most 100mm, 150mm and Mitchell base tripods (optional accessories may be required). Please refer to manufactures' manual for mounting details.

Safety Instructions

Attaching / removing the camera

Please use this manual to familiarise yourself with the operation of the CiNX Fluid head and observe these instructions to prevent any damage to your equipment. Ensure that all equipment is operating correctly and free from defects and damage, please also ensure that the tripod is steady, secure and that the bowl is approximately horizontal when attaching the camera. The operator is responsible for the safe operation of this piece of equipment.

- Do not exceed the maximum payload capacity of the Fluid head.
- Do not leave the camera unattended on the Fluid head.
- Do not release the SIDE LOAD LOCK LEVER whilst the camera is at an angle.
- Do not adjust the tripod whilst the camera is attached to the Fluid head.
- Ensure PAN HANDLE CLAMP and CLAMP NUT is securely tightened.
- Apply TILT LOCK when adding/removing equipment from the camera or when attaching/removing the camera from the Fluid head.
- Hold camera securely whilst changing Counterbalance, Pan Drag or Tilt Drag settings.
- Hold camera securely whilst adjusting the CLAMP NUT to level the Fluid head.

Operating Instructions

1. Attaching Mounting Base

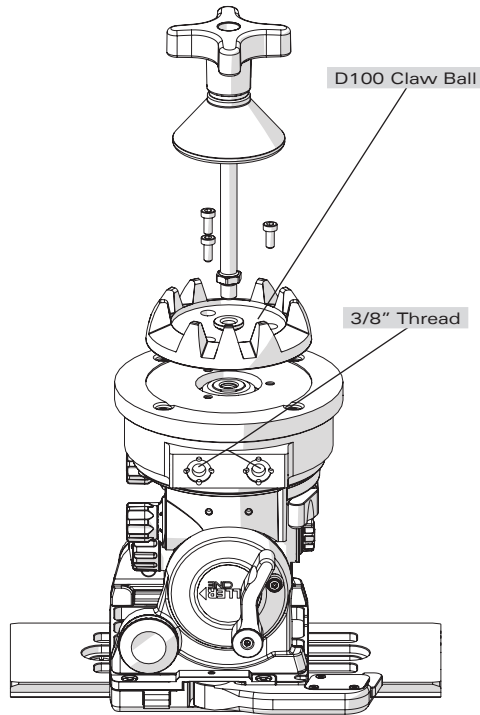


Fig. 3

The CiNX Fluid head comes standard with a D100mm Claw Ball Adaptor which is attached using 3 off M5 x 12mm Socket Cap Screws (P4653) (fig. 3). A D150mm Claw Ball Adaptor (1290) and Mitchell Base Adapter (1225) is also available as an optional accessory (fig. 4).

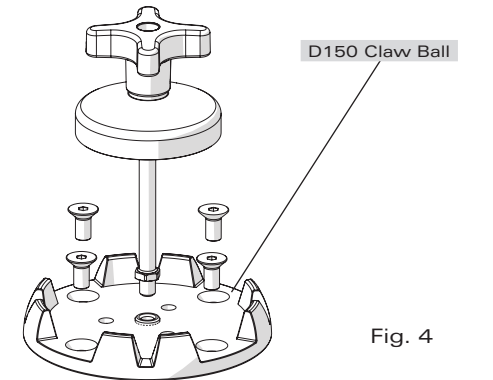


Fig. 4

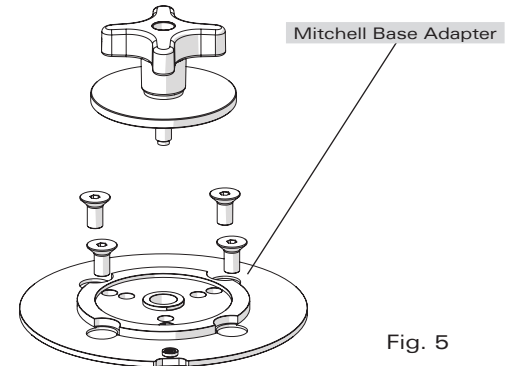


Fig. 5

Both D150mm Claw Ball and Mitchell Adaptor can be attached using 4 off 3/8" x 1" countersunk screws (PN10456) (fig. 5). This allows you to mount the CINX to any Mitchell base tripod, pedestal etc.

Operating Instructions

2. Camera Set-up

- 2.1 Remove the CAMERA PLATE by pulling and holding the SAFETY RELEASE PIN then pulling the SIDE LOAD LOCK LEVER outwards. Press the SAFETY LATCH BUTTON and remove the CAMERA PLATE from the BASE PLATE (Fig. 6).
- 2.2 Attach the CAMERA PLATE to the camera and securely tighten the screws. Refer to the Camera's owner's manual for correct method of attachment to the CAMERA PLATE.
- 2.3 Attach camera accessories and the battery to the camera, it is recommended to estimate the camera's Centre of Gravity (C of G) for the purpose of correctly positioning the camera on the CAMERA PLATE. The camera's C of G can be estimated by placing the camera on to a round rod and then shifting it backwards or forwards until a balance point – C of G – is achieved. It is recommended to identify this point on the CAMERA PLATE as it will be useful in step 2.5.

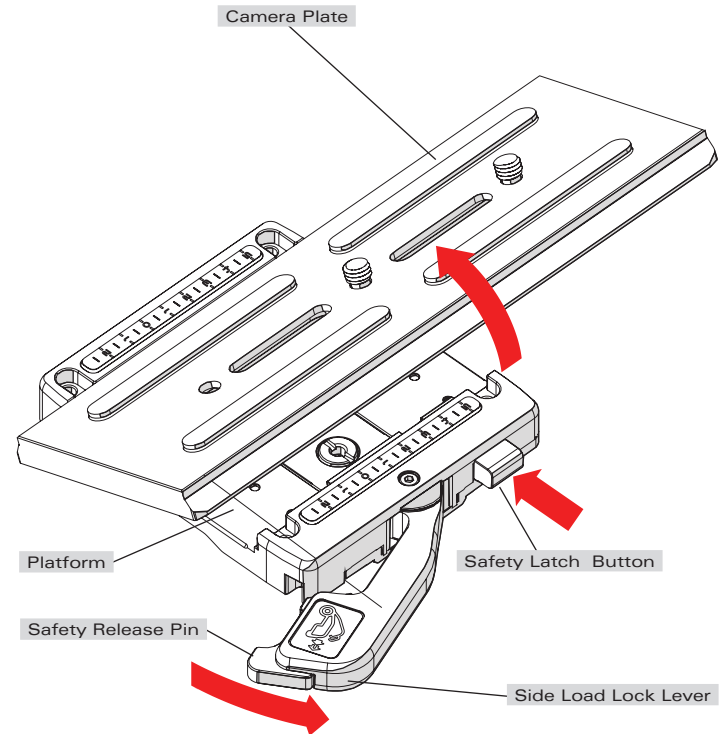


Fig. 6

Operating Instructions

- 2.4 Align the edge of the CAMERA PLATE with the PLATFORM, and then side load the CAMERA PLATE into the PLATFORM. Once the CAMERA PLATE is in position an audible sound will be heard. At this point, the CAMERA PLATE can slide forward / backward only. To release the camera plate press the safety latch button.
- 2.5 Position the CAMERA PLATE such that the camera's C of G is directly above the centre axis of the Fluid head, (fig. 7) then push the SIDE LOAD LOCK LEVER into the locked position. Check that the CAMERA PLATE is secure.

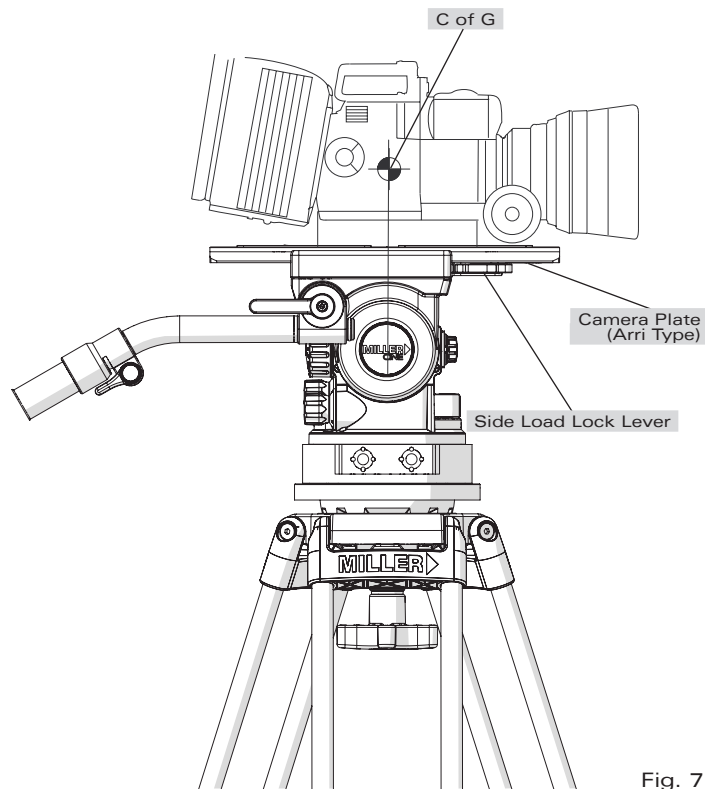


Fig. 7

Operating Instructions

3. Camera Plate Lock Adjustment

- 3.1 The Camera Plate Lock is designed to secure the CAMERA PLATE in a set position. The CiNX PLATFORM can accept a third party (Arri type) CAMERA PLATE, however, the Camera Plate Lock may need to be adjusted to account for small dimensional variations in third party CAMERA PLATES that can significantly affect the locking function.
- 3.2 Pull and hold the SAFETY RELEASE PIN then pull the SIDE LOAD LOCK LEVER outwards.
- 3.3 With the CAMERA PLATE in place, gently push the SIDE LOAD LOCK LEVER towards the PLATFORM until resistance is felt – this is the start of the locking action. Check the position of the SIDE LOAD LOCK LEVER as shown in (Fig. 9).
- 3.4 Adjustment is necessary if the SIDE LOAD LOCK LEVER position is outside the recommended range. Follow (Fig. 9) to determine the correct method of adjustment.
- 3.5 Using a 3mm Hex key unlock the LOCK SCREW (fig. 8), then using a broad flat screw driver turn the ADJUSTING SCREW (Fig. 8) in the direction shown by 1/8 of a turn and re-check step 3.3, repeat 3.4 if necessary. When adjusted correctly, the SIDE LOAD LOCK LEVER will be smooth to operate and requires modest effort to lock the CAMERA PLATE (Fig. 9).
- 3.6 Once the correct adjustment is achieved, remove the CAMERA PLATE and tighten the LOCK SCREW (fig 8).

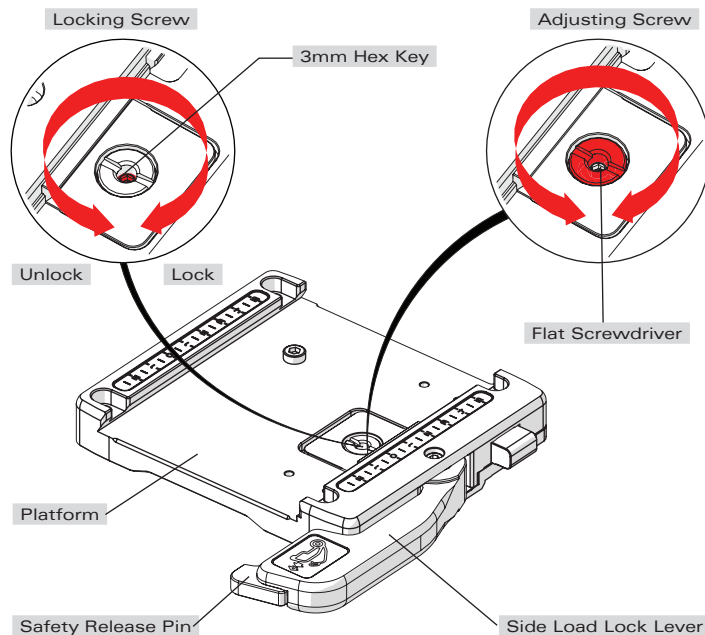
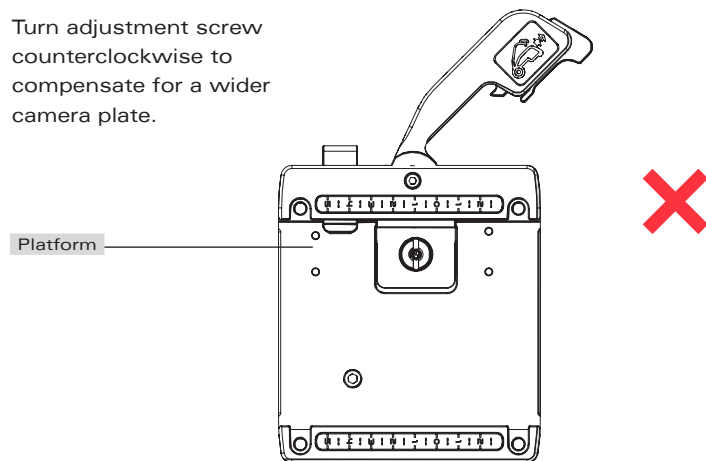


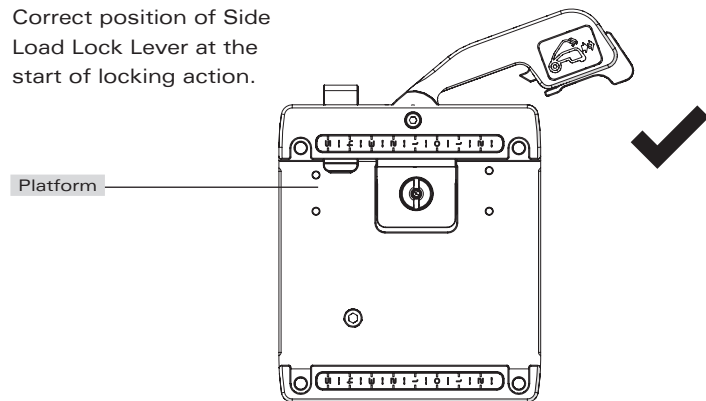
Fig. 8

Operating Instructions

Turn adjustment screw counterclockwise to compensate for a wider camera plate.



Correct position of Side Load Lock Lever at the start of locking action.



Turn adjustment screw clockwise to compensate for a narrower camera plate.

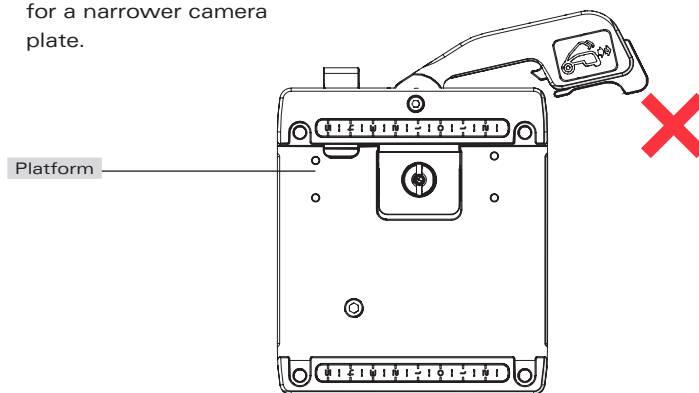


Fig. 9

Operating Instructions

4. Counterbalance Control

The counterbalance system was designed to neutralise the effect of the camera weight when it is tilted. The CiNX Fluid head offers a 16 position counterbalance system which is operated with the CB SELECTOR KNOB and the CB PLUS SELECTOR KNOB.

The system was designed for an efficient and ergonomic control of the counterbalance mechanism which delivers a wide payload range capacity.

The counterbalance selector knob and the CB PLUS SELECTOR KNOB must be operated when the CAMERA PLATE is in a horizontal position.

After changing the counterbalance setting it may be necessary to tilt the camera back and forth to ensure that the CB spring has engaged. The camera must be held securely while changing the counterbalance setting.

- 4.1 For safety select counterbalance position 16, being the orange coloured marker on the CB SELECTOR KNOB pointing to position 16 and the CB PLUS SELECTOR KNOB displaying an orange marker.
- 4.2 Hold the camera and release the TILT LOCK, then gently tilt the camera from the horizontal position forward then backward and observe its response. If the camera 'springs back' to the horizontal position then a lower counterbalance setting is required, rotate the CB SELECTOR KNOB clockwise to a lower position and recheck, select lower setting again if necessary.
- 4.3 Finer adjustments can be made by toggling the CB PLUS SELECTOR KNOB (Fig. 10).
- 4.4 Correct counterbalance setting has been achieved when minimum effort is required to move the camera over the entire tilt range.

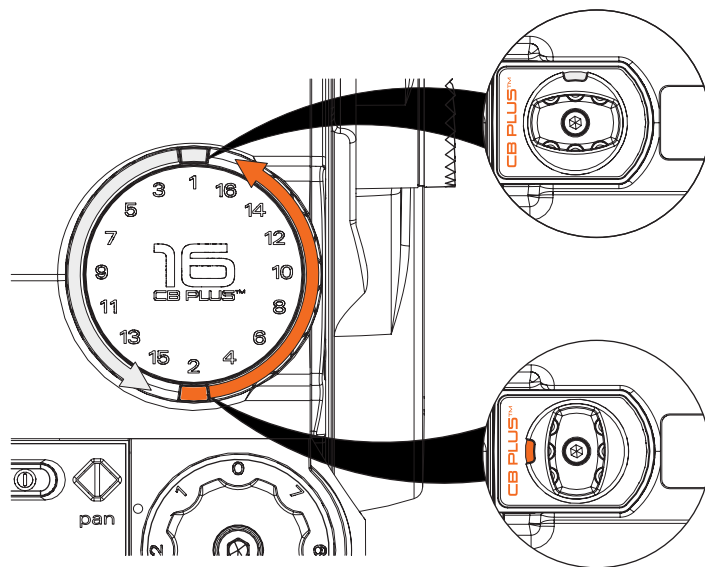


Fig. 10

Operating Instructions

5. Pan-tilt Drag Control

The CiNX 5 & 7 Fluid head offers 7 selectable positions of fluid drag + zero setting in the Pan and Tilt. The settings are equally stepped from light drag in position 1 up to heavy drag in position 7, the drag plates are completely disengaged in position zero. The CiNX 3 offers 5 selectable positions of Fluid drag + zero setting.

- Do not Pan or Tilt the Fluid head whilst adjusting PAN or TILT DRAG CONTROL or whilst the PAN & TIL DRAG CONTROL is between settings.
- The drag setting can be changed at any tilt or pan angle.

6. Pan-tilt Lock Control.

The CiNX Fluid head offers high capacity caliper disc brake system to hold the Fluid head in a fixed pan and/or tilt position. Camera position will not change when applying or releasing the Pan-tilt locks.

- Do not pan or tilt the Fluid head whilst the PAN or the TILT LOCK is partially applied.

7. Illumination.

The CiNX Fluid head offers illumination of the PAN & TILT DRAG CONTROL settings, BUBBLE LEVEL and PAN & TILT INDICATOR when the low ambient light conditions exist. Illumination can be achieved by pressing the ILLUMINATION BUTTON once. The light will switch off after 10 seconds.

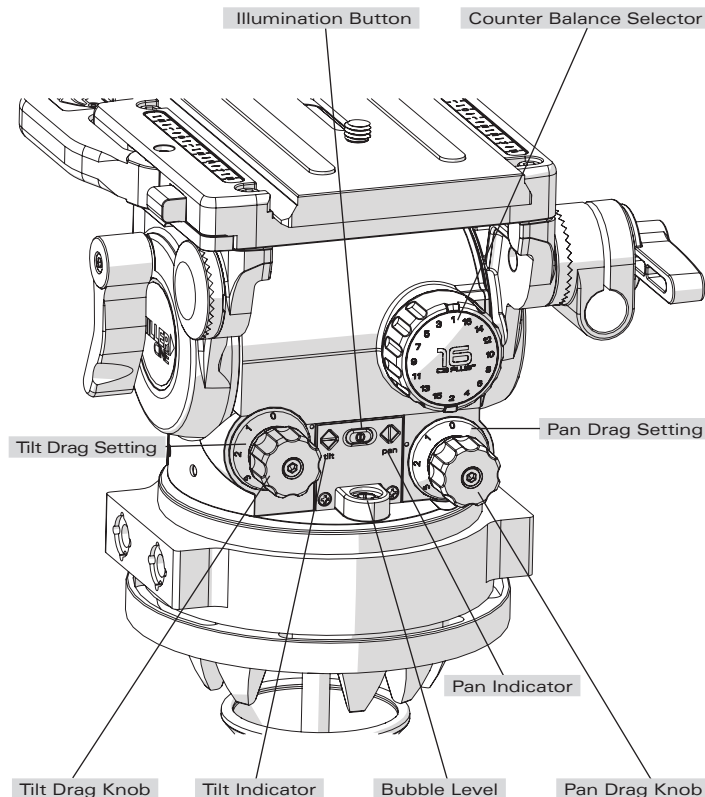


Fig. 11

Maintenance

The CiNX Fluid head offers high quality surface coatings, dust and moisture seals. Miller recommends keeping the Fluid head clean at all times by using soft brushes and lint free cloth to wipe over the surfaces.

- Do not immerse the Fluid head in any liquid.
- Do not use stiff brushes, abrasives, harsh detergents and solvents.

Battery Replacement

The CiNX Fluid head uses a single GP23A type - 12 Volt battery for Illumination. Miller recommends the following batteries to provide long life performance – Duracell MN21/23, Eveready A23 or Vinnic L1028.

- Using a Phillips head #1 screw driver, remove the two RETAINING SCREWS, BATTERY DOOR and the old battery.
- Insert the new battery as shown in (Fig. 12).
- Insert the tab on the BATTERY DOOR into the body first then align the two screw holes and tighten the screws snugly.

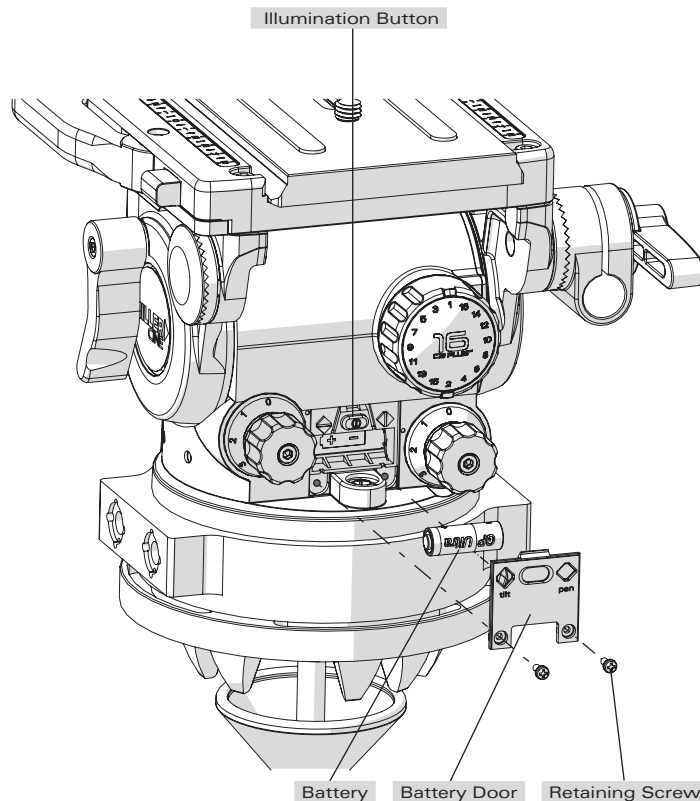


Fig. 12

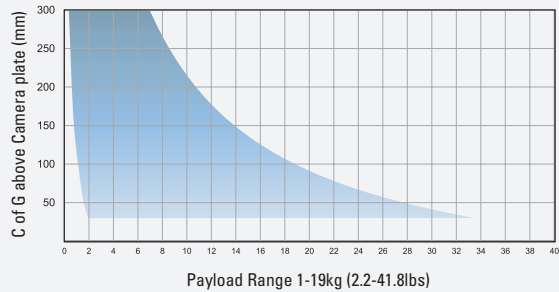
Specifications

	1103 CiNX 3	1105 CiNX 5	1107 CiNX 7
Weight	3.8kg (8.4lbs) 4.1kg (9.0lbs) with 100mm bowl	4.0kg (8.8lbs) 4.3kg (9.5lbs) with 100mm bowl	4.0kg (8.8lbs) 4.3kg (9.5lbs) with 100mm bowl
Payload range	1-19kg (2.2-41.8lbs)	2-21kg (4.4-46.2lbs)	6-25kg (13.2-55lbs)
Pan-tilt drag	5 selectable fluid drag positions + 0	7 selectable fluid drag positions + 0	7 selectable fluid drag positions + 0
Pan range	360°	360°	360°
Pan-tilt locks	Positive lock calliper brake system	Positive lock calliper brake system	Positive lock calliper brake system
Tilt angle	+90°/-75°	+90°/-75°	+90°/-75°
Counterbalance	16 selectable positions	16 selectable positions	16 selectable positions
Camera platform	Side load quick release camera plate (Arri type). Supplied with Miller #1065	Side load quick release camera plate (Arri type). Supplied with Miller #1065	Side load quick release camera plate (Arri type). Supplied with Miller #1065
Sliding range	When used with Miller #1065 sliding range is 150mm (5.9")	When used with Miller #1065 sliding range is 150mm (5.9")	When used with Miller #1065 sliding range is 150mm (5.9")
Height above 100mm bowl	202mm (8.0")	202mm (8.0")	202mm (8.0")
Height above Mitchell base	200mm (7.9")	200mm (7.9")	200mm (7.9")
Mounting base	Flat base with 3 x M5 holes and 4 x 3/8 holes. Comes standard with 100mm claw ball fitted, 150mm claw ball and Mitchell base available as optional accessories	Flat base with 3 x M5 holes and 4 x 3/8 holes. Comes standard with 100mm claw ball fitted, 150mm claw ball and Mitchell base available as optional accessories	Flat base with 3 x M5 holes and 4 x 3/8 holes. Comes standard with 100mm claw ball fitted, 150mm claw ball and Mitchell base available as optional accessories
Illuminated controls	Bubble level, pan-tilt drag controls	Bubble level, pan-tilt drag controls	Bubble level, pan-tilt drag controls
Temperature range	-40° to +65°C (-40° to +149°F)	-40° to +65°C (-40° to +149°F)	-40° to +65°C (-40° to +149°F)
Pan handle	Telescopic 390 to 590mm (15.4 to 23.2")	Telescopic 390 to 590mm (15.4 to 23.2")	Telescopic 390 to 590mm (15.4 to 23.2")

Specifications

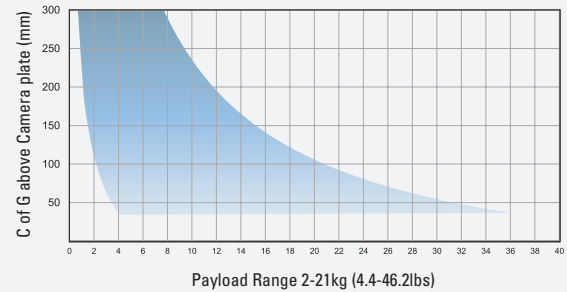
1103 CiNX 3

Counterbalance Performance



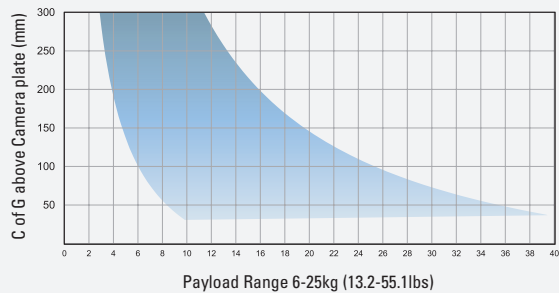
1105 CiNX 5

Counterbalance Performance



1107 CiNX 7

Counterbalance Performance



Storage

The CiNX Fluid head can be stored for extended periods; Miller recommends storage in a Miller Case and the following:

- Remove battery.
- Clean the external surfaces.
- Keep in a dry place away from direct sunlight.
- Loosen off PAN & TILT LOCK.

Spare Parts and Accessories

ITEM	ITEM NO.
Battery	P3798
Camera screw 3/8"	P0037
Camera Plate (Arri Type)	1065
Additional Pan Handle HD Telescopic With Clamp	698
Additional Pan Handle Articulated With Extender	1230
Accessory Serrated Handle Clamp Extender	1238
Accessory Mounting Block (AX)	1260
Mitchell base adaptor with Clamp Nut	1225
D100 Claw Ball Level (includes Clamp Nut)	1290
Clamp Nut (to suit D100mm Bowl)	PN10223
D150 Claw Ball Level (includes Clamp Nut)	1295
Miller Head Case CiNX (suit D100 Bowl)	3602
3/8" x 1" Countersunk Socket Screw	PN10456

Warranty

Please refer to warranty card for complete details.

Service, Sales and Support

Agent if a change of performance is observed as a result of dropping or rough usage. For information regarding sales and service of Miller products or for your nearest Miller representative please contact us via our website or at the following:

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